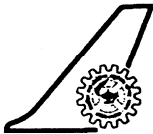


## Documentation sheet

	<b>National Aerospace Laboratories</b>	<b>Class</b> Restricted <b>No. of copies</b> 5
<b>Title</b> Development of Matlab software modules for Surface Particle Image Tracking		
<b>Author/s</b> L. VENKATAKRISHNAN		
<b>Division</b> EAD	<b>NAL Project No.</b> E-0-230	
<b>Document No.</b> PD EA 0514	<b>Date of issue</b> Dec 2005	
<b>Contents</b> <span style="border: 1px solid black; padding: 0 5px;">12</span> <b>Pages</b> <span style="border: 1px solid black; padding: 0 5px;">5</span> <b>Figures</b> <span style="border: 1px solid black; padding: 0 5px;">0</span> <b>Tables</b> <span style="border: 1px solid black; padding: 0 5px;">5</span> <b>References</b>		
<b>External Participation</b>		
<b>Sponsor</b> The Boeing Company, USA		
<b>Approval</b> Head, Experimental Aerodynamics Division		
<b>Remarks</b>		
<b>Keywords</b> Surface Particle Tracking, Oil flow visualization		
<b>Abstract</b>  Based on recently suggested new approach to surface oil flow visualization, a correlation-based approach for Surface Particle Image Tracking has been developed as usable software to compute particle displacements from particle images of surface oil flow visualization. Three correlation methodologies have been implemented with a user customizable interrogation size and mesh for processing. The algorithm has been used to analyze data sets supplied by Boeing. The results show that the displacements can be obtained using this approach and can yield very useful data if proper care is taken to obtain oil-particle images.		